

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2001111074 A**

(43) Date of publication of application: **20.04.01**

(51) Int. Cl.

H01L 31/04
// H01L 21/205

(21) Application number: **2000046345**

(22) Date of filing: **23.02.00**

(30) Priority: **03.08.99 JP 11219998**

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(54) **SEMICONDUCTOR ELEMENT AND SOLAR BATTERY**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a semiconductor element and a solar battery at a low cost which have high efficiency, safety and long life.

SOLUTION: In this semiconductor element, a compound semiconductor layer containing nitride based compound semiconductor composed of at

least one element selected out of at least Al, Ga and In, and nitrogen element is formed as a window layer on a semiconductor substrate. In this solar battery, a compound semiconductor layer containing nitride based compound semiconductor expressed by a composition formula $AlXGaYInZNW$, where X, Y, Z and W show composition ratio, and satisfy $0.8 \leq (X+Y+Z)/W \leq 1.2$ and $0.1 \leq Z/(X+Y+Z) \leq 1.0$ is formed on a semiconductor substrate.

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